

PHOTOGRAPHIC RECORD OF THE JERDON'S OR DOUBLE-BANDED COURSER *CURSORIUS* *BITORQUATUS*

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(With a colour plate)

INTRODUCTION

The Jerdon's or Double-banded Courser *Cursorius bitorquatus* had been resighted after 86 years (since its last record in 1900) in the Lankamalai hill-range areas on 19 January 1986 (Bhushan 1986). The events leading upto the resighting and previous records by Jerdon near Cuddapah (Blyth 1848), Blanford near the Godavari at Bhadrachallam (Blanford 1898), and, by Campbell near Anantapur (Ali 1977) have been described in detail in my earlier paper (Bhushan 1986b). Failure to record the Jerdon's Courser after the 1900 sighting had led to the species being considered as either extinct or nearly so (Ripley 1952, 1961, Greenway 1958, Howard and Moore 1980, Walters 1980, King 1981). The Jerdon's Courser was known only from the two skins collected by Blanford, now housed in the British Museum, prior to my January 1986 record.

Apart from the communications mentioned above, very little biological work has been done on the Jerdon's Courser. The present study formed part of the Bombay Natural History Society's (BNHS) research project "Study of Ecology of Rare and Endangered Species of Wildlife and their Habitat" funded

by the Fish and Wildlife Service, USA, through the Ministry of Environment, Forests and Wildlife, Govt. of India.

The study has been conducted at the Lankamalai hill-range area during discontinuous study-periods from January to May and September to October 1986. The main study area was the foothill-scrub expanses below Lankamalai hills near Reddipalli and Konduru villages of Atlur Mandal, Cuddapah district of Andhra Pradesh.

The Lankamalai hills are part of the Lankamalai Reserve Forest in the Siddavatam Range of Cuddapah Forest Division of Andhra Pradesh. The main study area refers to the foothill-scrub intersected by the reserve forest boundary line and also considers the scrub expanses in the non-reserve forest areas. Both areas are referred to as 'above' and 'below' the line (Bhushan 1986b, p. 10).

The Lankamalai foothill-scrub forest types were both Thorny and Non-Thorny scrub jungle patches (Champion & Seth 1968). While the Thorny scrub consisted of *Acacia*, *Zizyphus* and *Carissa*, the Non-Thorny Scrub was of *Cassia*, *Hardwickia*, *Dalbergia*, *Butea* and *Anogeissus* among other species. Further ahead, above the line, towards the lower slopes are *Hardwickia binata* forests followed by Thorn forests dominated by *Anogeissus* along with *Albizzia*, *Acacia*, and *Zizyphus* (Reddy 1983, Bhushan 1986b).

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METHODOLOGY

The preliminary surveys in 1985 had involved eliciting information from locals about their knowledge of the Double-banded Courser's existence (Bhushan 1985 a & b). Field-work in 1986 was undertaken with the help of individuals who knew exact locations of the Courser (Bhushan 1986 a & b).

Field work involved walking about in the area, listing the birds seen and keeping track of the extent of habitat-types. This was alternated by using a spotterscope of 10× magnification. Equipment used also included a 12×50 pair of binoculars. Photographs were taken with an Asahi Pentax Program Plus Camera with a normal 50 mm & 70-210 mm zoom lenses. A wide-angled instamatic camera was also utilised.

RESULTS

A solitary Jerdon's Courser was sighted on 24th September 1986, in similar habitat as the January sighting and was approximately two kilometres north of the same. The courser has also been reliably sighted by local Reddipalli villagers, Aitanna and Pulliah, at another location in the foothill scrub in between the other two sightings on 10th May 1986.

The two coursers seen in January at night had flown up and glided down noiselessly into open patches. The September sighting was at 0630-0715 hours. The bird was sighted in a *Carissa* bush (height c. 30 cm) and walked off on being flushed accidentally by my near presence. It sat next to a stone beside a dead branch in the open patch and remained motionless as I kept approaching while photographing it. The courser then stood up and walked off behind an *Acacia* bush (2.5 m tall) as I went closer, stood for less than 30 seconds,

and sat under its canopy in the shadow of the stem. The bird later walked to another bush, went under the canopy, stood in the shade for about a minute, flew up and beyond the bush-line against the hills. It could not be sighted later.

The three sightings have been in similar habitat-patches in the foothill scrub. The Jerdon's Courser seems to be almost restricted to bare grassless patches of open ground amidst scrub bushes. These patches have a cover of grass only during the monsoon and is under grazing pressure otherwise. The three open patches in which the courser was seen are not more than 500 sq. m in area. There are similar sized open patches all along the Lankamalai foothills both above and below the line. The photographs now constitute the only known positive evidence of the species' presence in its habitat.

Below the line and after the scrub areas near Reddipalli and Konduru villages, are present open bare grazing grounds larger than 500 sq. m and nearly 1-3 sq. km in area. The vegetation in these larger open patches comprise of shrub bushes towards the reserve forest area and of cultivation towards the village areas. The Jerdon's Courser has never been sighted in the larger open patches even by locals who frequent these grounds regularly.

DISCUSSION

Intruder reaction

The Jerdon's or Double-banded Courser's reaction to my presence during the January and September sighting is similar to the *Rhinoptilus* behaviour recorded for presence of an intruder. Bannermann (1931) records Major Hutson describing a *R. chalcopterus* sighted on a "newly burnt patch in fairly open

PHOTOGRAPHIC RECORD OF JERDON'S COURSER

bush. It stood motionless when approached and only took to flight when he was within six yards, and then landed again and stood motionless once more. This performance during which it did not utter a note, was repeated several times".

Andersson, in the same account, describes his experience in attempting to flush the *chalcopterus* from the undergrowth. He mentions, "when suddenly flushed, the bird darts behind a tree" where it stops, and continues its "flight by hard running, only using its wings in its utmost need".

Rudolf Braun, a German naturalist, recorded the *chalcopterus* getting up "right under one's feet, coming down again 30-40 metres away and usually remains perfectly motionless". (Bannermann 1951).

Habitat

Jerdon (1877) had found the Double-handed Courser to inhabit "rocky and undulating ground with thin forest jungle" and believed the species to be a "mountain form of *Cursorius*, frequenting rocky hills with thin jungle". Blanford (1898) recorded the species in "thin forest or high scrub, never in open ground" and "never saw any on hills" in contrast to Jerdon's belief. I have described the Double-banded Courser being present in similar habitat in my earlier communication (Bhushan 1986 b).

Among the African species, the Bronze-winged Courser *R. chalcopterus* prefers bush-covered country and also utilizes "little bare, gravelly patches among the woods" as breeding spots (Bannermann 1931). The Two-banded Courser *R. africanus* is a "bird of rocky thorn scrub country, sandy plains and flat deserts" while the Heuglin's or Three-banded Courser *R. cinctus* is rarely found away from thick thorn scrub (Mackworth-Praed and Grant 1952).

Later communications record the three-banded Courser nesting on bare ground, next to a pile of windblown leaves about one metre from the base of a small *Acacia* tree (Kemp and Maclean 1973). Uys and Underhill (1977) recorded the Two-banded Courser breeding on bare ground, a few metres away from stunted bushes on both the occasions the bird had allowed the observers to approach very closely in a manner similar to my September sighting of the *bitorquatus* during which, however, I could not record any breeding. The habitat is similar to descriptions of the same for the three African *Rhinoptilus*.

Maclean (1967) describes the habitat of the Double-banded Courser *R. africanus* as 'calcrete covered with small woody shrublets between six inches and a foot', and, records that the *africanus* is "almost confined to the calcrete, which is usually bare between the shrublets, except after good rains..."; He also mentions that "the barest areas where drinking antelopes have trampled the vegetation are usually avoided by the coursers".

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Above: The Jerdon's Courser. Below: Habitat of the Jerdon's Courser.
(Photos: Author)